GEOKINETICS INC. shale oil development and production

391 Chipeta Way D-2

Salt Lake City, Utah 84108-1282

File

ACT/047/002

Copy to Tom T.,

Telephone (801) 583,0511

Tom P., Sue, Wayne,

PAM

June 22, 1983

Mr. Jim Smith
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, UT 84116

REFERENCE: Geokinetics ACT-047-002 Uintah County, Utah

Dear Jim:

As I briefly mentioned to you over the telephone on June 21, 1983, and discussed in more detail later on that day with Tom Tetting of your office, Geokinetics Inc. is planning to drill and blast three (3) additional retorts (#1, #2 and #3) 370' x 320' in surface area each. The purpose of developing the retorts at this time is to provide information vital to the refinement of the complex blasting technique utilized by the Company to create the in situ retorts. The locations of these retorts are shown on the attached map.

Average blasthole depth will be 95 feet, and blasting will take place between August and December of 1983.

All operations will be conducted in accordance with the Division's Rules and Regulations of the Mining and Reclamation Plan. Measures to adequately protect the stored topsoil are explained on the attachment.

If you have any questions about this phase of our Research & Development Program initially approved under the Kamp Kerogen Plan, please let me know.

CVC:mw

Attachments

cc: W.K. McOmber J.M. Lekas

Sincerely,

Catherine V. Chachas by mu

Environmental Affairs

RECEIVED

DIVISION OF OIL, GAS & MINING

TOPSOIL STOCKPILE PROTECTION PLAN

In order to adequately protect the stored topsoil, measures will be employed to limit the effects of overland flow as well as erosion of the stockpile surface. These measures will include:

1) the use of diversion channels for conveying surface runoff away from the pile; 2) constructing sediment containment berms along the peripheral of the pile; 3) mulching with straw, and seeding with a temporary plant cover; and 4) limiting the side slopes of the pile, as well as overall depth of the pile.

The planned seed mix along with the seeding rate will be as follows:

Species	lbs./ac.PLS
Agropyron dasystachum	10
A. elongatum	10
Lolium multiflorum	20
Melilotus alba	5

The stockpile surface will be roughened to hold surface runoff as well as provide moisture for the seeded cover. Seeding will take place during the late spring provided that soil moisture conditions are adequate. Otherwise, the surface will be mulched for protection during the summer and the stockpile seeded in the late fall.